



Consumer Confidence Report 2002

Your Potable Water (2002)

Highland is pleased to present its fourth Annual Quality Water Report. Regulations issued by the United States Environmental Protection Agency (USEPA) require that we inform you about the quality of water and services we provide. We are pleased to comply and quite proud of our performance in this role. Our constant goal is to provide you with a safe and dependable supply of drinking water.

Background - Highland has provided public water-supply services since 1926, when it acquired and upgraded rustic facilities begun in the 1890's when the Pet Milk Company built a dam and piped untreated water to their milk-condensing plant. Our water source is Silver Lake, located off State Route 143 northwest of town.

A succession of other improvements followed construction in 1926 of the filtration plant, and the treatment works was expanded and overhauled completely in 1993. Water is pumped from the lake, treated by flocculation and settling, pre-chlorinated, filtered, post-chlorinated, and pumped to the distribution system. Activated carbon is used to remove organic chemicals and aid in taste and odor control. The treatment plant presently can produce 4.2-million gallons daily of potable water.

Mandatory Statements - USEPA requires that this report state verbatim, that:

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline (1-800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the USEPA's Safe Drinking Water Hotline (1-800-426-4791).

Required Information - USEPA also requires that we provide the following information:

Drinking water sources (for both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it can dissolve naturally occurring minerals and radioactive materials and pick up substances resulting from the presence of animals or human activity. Possible contaminants consist of:

Microbes, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, livestock operations and wildlife;

Inorganic compounds, such as salts and metals, which may be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming;

Pesticides or herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff and residential uses;

Organic chemicals, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and may also come from gas stations, urban stormwater runoff and septic systems; and

Radioactive compounds, which may be naturally occurring or the result of oil and gas production or mining activities.

The USEPA and the Illinois EPA regulate the amounts of nearly 80 potential contaminants in water provided by public systems in order to ensure that our tap water is safe. The Federal Drug Administration regulates potential contaminants in bottled water, which must provide the same protection of public health.

Source Water Assessment - The Illinois EPA has completed the source water assessment for our supply. If you would like a copy of this information, please stop by City Hall or the Utilities Complex on Route 40. The Illinois EPA considers all surface water sources of community water supply to be susceptible to potential problems; hence the reason for mandatory treatment for all surface water supplies in Illinois. Mandatory treatment includes coagulation, sedimentation, filtration and disinfect ion.

Highland's Performance - Highland personnel are diligent in the detection of contaminants in our supply, and prepared to adjust the treatment process to remove any contaminant found above allowable limits. We perform about 2,000 tests every year to ensure levels of contaminants remain below recommended safe levels.

During 2002, no violations were found in water produced by Highland. Water quality is monitored by observations and laboratory testing at the treatment plant and verified by samples analyzed by laboratories of the Illinois EPA and independent services. In addition, each individual filter is monitored on a continuous basis for turbidity removal efficiency.

Your Participation - We want you to understand the efforts we make to continually improve the water treatment process, protect our water resources, and provide the information you need to make informed decisions about water-supply matters. Consequently, copies of this report will be posted at City Hall and Latzer Library and may be obtained at City Hall and the Utilities Complex on Route 40 during business hours. This Consumer Confidence Report will not be mailed or hand delivered. Annual reports will be made public each July.

If you have any questions about this report or concerning your water utility, please feel free to contact the Supervisors Steve Shultz (Water Treatment) or Gerv Ottensmeier (Water Distribution) or a receptionist at City Hall (618-654-9891). We want our valued customers to be informed about their water utility. If you want to learn more, please attend any regularly

scheduled Silver Lake Commission or City Council meeting.

The meetings, which feature a public forum at which any interested party may speak or ask questions, are held, respectively, on the second Thursday and first and third Mondays of each month beginning at 7:00PM at City Hall (1115 Broadway).

We are deeply committed to ensuring the highest practicable quality of your water and invite any suggestion or comment to that end.

1190550 HIGHLAND

2001 Water Quality Data

-Definition of Terms-

Maximum Contaminant Level Goal (MCLG): *The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.*

Maximum Contaminant Level (MCL): *The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.*

Level Found: *This column represents an average of sample result data collected during the CCR calendar year. In some cases, it may represent a single sample if only one sample was collected.*

Range of Detections: *This column represents a range of individual sample results, from lowest to highest that were collected during the CCR calendar year.*

Date of Sample: *If a date appears in this column, the Illinois EPA requires monitoring for this contaminant less than once per year because the concentrations do not frequently change. If no date appears in the column, monitoring for this contaminant was conducted during the Consumer Confidence Report calendar year.*

Action Level (AL): *The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.*

Treatment Technique (TT): *A required process intended to reduce the level of a contaminant in drinking water.*

nd: *Not detectable at testing limits.* **n/a:** *Not applicable*

Detected Contaminants

| <i>Contaminant (unit of measurement) Typical Source of Contaminant</i> | <i>MCLG</i> | <i>MCL</i> | <i>Level found</i> | <i>Range of detections</i> | <i>Violation</i> | <i>Date of Sample</i> |
|----------------------------------------------------------------------------------------------------------------------------------------------|-------------|------------|--------------------|----------------------------|------------------|-----------------------|
| <u>Microbial Contaminants</u> | | | | | | |
| TOTAL COLIFORM BACTERIA (# pos/mo) Naturally present in the environment. | 0 | >1 | 1 | | | |
| TURBIDITY (NTU) (%<0.5 NTU) Soil runoff. | n/a | TT | 100.000 | 100.000 - 100.000 | | |
| TURBIDITY (NTU) (NTU) Soil runoff. | n/a | TT=5NTUmax | 0.230 | n/a | | |
| <u>Radioactive Contaminants</u> | | | | | | |
| BETA/PHOTON EMITTERS (pCi/l) Decay of natural and man-made deposits. | 0 | 50* | 5.000 | 5.000 - 5.000 | | 08/04/1999 |
| <u>Inorganic Contaminants</u> | | | | | | |
| BARIUM (ppm) Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits. | 2 | 2 | 0.077 | 0.077 - 0.077 | | |
| COPPER (ppm) Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives. | 1.3 | AL=1.3 | 0.160 | 0 exceeding AL | | 09/30/1999 |
| FLUORIDE (ppm) Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories. | 4 | 4 | 1.180 | 1.180 - 1.180 | | |
| LEAD (ppb) Corrosion of household plumbing systems; Erosion of natural deposits. | 0 | AL=15 | 5 | 0 exceeding AL | | 09/30/1999 |
| NITRATE (AS NITROGEN) (ppm) Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits. | 10 | 10 | 1.400 | 1.400 - 1.400 | | |

| | | | | |
|-------------------------------------------------------------------------------------------------------------------------|----|----|-------|---------------|
| NITRATE & NITRITE (ppm) Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits. | 10 | 10 | 1.400 | 1.400 - 1.400 |
|-------------------------------------------------------------------------------------------------------------------------|----|----|-------|---------------|

Disinfectants\Disinfect ion By-Products

| | | | | |
|-----------------------------------------------------------------------------------|-----|-----|--------|-----------------|
| TTHMs [TOTAL TRIHALOMETHANES] (ppb) By-product of drinking water chlorination. | n/a | 100 | 68.750 | 59.000 - 79.000 |
|-----------------------------------------------------------------------------------|-----|-----|--------|-----------------|

| <i>Contaminant (unit of measurement) Typical Source of Contaminant</i> | <i>MCLG</i> | <i>MCL</i> | <i>Level found</i> | <i>Range of detections</i> | <i>Violation</i> | <i>Date of Sample</i> |
|----------------------------------------------------------------------------|-------------|------------|--------------------|----------------------------|------------------|-----------------------|
|----------------------------------------------------------------------------|-------------|------------|--------------------|----------------------------|------------------|-----------------------|

Unregulated Contaminants

| | | | | |
|--------------------------------------------------------------------------|-----|-----|--------|-----------------|
| BROMODICHLOROMETHANE (ppb) By-product of drinking water chlorination. | n/a | n/a | 14.500 | 10.000 - 19.000 |
|--------------------------------------------------------------------------|-----|-----|--------|-----------------|

| | | | | |
|-----------------------------------------------------------------------------------------------------------------------|-----|-----|--------|-----------------|
| CHLOROFORM (ppb) Used as a solvent for fats, oils, rubber, resins; A cleansing agent; Found in fire extinguishers. | n/a | n/a | 51.500 | 43.000 - 60.000 |
|-----------------------------------------------------------------------------------------------------------------------|-----|-----|--------|-----------------|

| | | | | |
|-------------------------------------------------------------------------------------------------|-----|-----|-------|---------------|
| DIBROMOCHLOROMETHANE (ppb) Used as a chemical reagent; an intermediate in organic synthesis. | n/a | n/a | 2.750 | 1.000 - 5.000 |
|-------------------------------------------------------------------------------------------------|-----|-----|-------|---------------|

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|-----------------------------------------------------------|-----|-----|--------|-----------------|
| SULFATE (ppm) Erosion of naturally occurring deposits. | n/a | n/a | 60.200 | 60.200 - 60.200 |
|-----------------------------------------------------------|-----|-----|--------|-----------------|

State Regulated Contaminants

| | | | | |
|----------------------------------------------------------------------------------|-----|-----|--------|-----------------|
| SODIUM (ppm) Erosion of naturally occurring deposits; Used as water softener. | n/a | n/a | 12.000 | 12.000 - 12.000 |
|----------------------------------------------------------------------------------|-----|-----|--------|-----------------|

Unit of Measurement

- ppm - Parts per million, or milligrams per liter
- ppb - Parts per billion, or micrograms per liter
- pCi/l - Picocuries per liter, used to measure radioactivity
- NTU - Nephelometric Turbidity Unit, used to measure cloudiness in drinking water
- %<0.5 NTU - Percent samples less than 0.5 NTU
- # pos/mo - Number of positive samples per month

Water Quality Data Table Footnotes

TURBIDITY (NTU)

Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of water quality and the effectiveness of our filtration system and disinfectants.

*** BETA/PHOTON EMITTERS**

The MCL for beta particles is 4 mrem/year. EPA considers 50 pCi/l to be a level of concern for beta particles.

UNREGULATED CONTAMINANTS:

A maximum contaminant level (MCL) for this contaminant has not been established by either state or federal regulations, nor has mandatory health effects language. The purpose for monitoring this contaminant is to assist USEPA in determining the occurrence of unregulated contaminants in drinking water, and whether future regulation is warranted.

SODIUM

There is not a state or federal MCL for sodium. Monitoring is required to provide information to consumers and health officials that are concerned about sodium intake due to dietary precautions. If you are on a sodium-restricted diet, you should consult a physician about this level of sodium in the water.